FLOW CYTOMETRY CORE FACILITY

STANDARD OPERATING PROCEDURE			
Data Backup Procedures			
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C003	1.1	Computer	09-25-2022

Approved By:

Director of Flow Cytometry Core Facility	**DATE**
Eric Wieder, Ph.D. Signature: Eric Wieder	09-25-2022

SOP Revision History:

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1.0	Development of SOP	01-31-2022	sjsaigh	Dr. Wieder
1.1	Review/update	09-25-2022	pguevara	Dr. Wieder

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PURPOSE

The purpose of this standard operating procedure is to describe the procedures used by the University of Miami, Miller School of Medicine Sylvester Comprehensive Cancer Center Flow Cytometry Shared Resource staff in backing up data files from instrument workstations.

SCOPE

This standard operating procedure applies to the backup of data on all instrument workstations by SCCC Flow Cytometry Shared Resource personnel.

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1. AUTHORITY AND RESPONSIBILITY

1.1 The UM SCCC Flow Cytometry Shared Resource has the authority to establish these procedures and is in control of the Standard Operating Procedure (SOP) document.

1.2 The UM SCCC Flow Cytometry Shared Resource is responsible for the implementation of these procedures and ensuring core personnel are appropriately trained.

2. TARGET USERS

2.1 UM SCCC Flow Cytometry Shared Resource staff.

3. DEFINITIONS

3.1 BD: BD Biosciences

3.2 Diva: Indicates FACSDiva software from Becton Dickinson

4. DATA BACKUP ON BD INSTRUMENTS

4.1 Automatic Backup of Data

4.1.1 Diva contains a built-in real time data backup tool which needs to be configured for EACH USER PROFILE.

4.1.2 Open Diva and log into the desired user profile.

4.1.3 Click on the “Edit” button on the top toolbar in the software.

4.1.4 Navigate to “User Preferences.”
4.1.5 A pop-up box will open, click on the “FCS” tab.
4.1.6 Under “Export FCS” make sure that the box next to “Add experiment folder to export path” is checked.
4.1.7 Under “Export FCS” make sure that the box next to “Export FCS after recording” is checked. Then click the “Browse” button next to “Folder location” and navigate to facility network server (SCCCFCCF). Open the “FCSR” folder and then open the folder labeled “DATA BACKUP.” Then choose the appropriate instrument folder and click open/save.
4.1.8 Under “Export FCS” make sure the box next to “Date folder” is checked.
4.1.9 Under “FCS Naming Format,” “Specimen Name” and “Tube Name” are on by default (grayed out). If desired, you can also check “Experiment Name” and “Auto Increment” to add that information to the backed up files. The file delimiter is set to “Underscore” by default but can also be changed if desired.
4.1.10 Click “OK” at the bottom of the “User Preferences” box to save.

5. DATA BACKUP ON CYTEK AURORA

5.1 Manual Backup of Data
5.1.1 The backup tool FreeFileSync (https://freefilesync.org/) has been installed on the Aurora computer. This tool allows for the comparison and synchronization of files to create backups.
5.1.2 Open FreeFileSync. To create a backup configuration, click on the “New” button.
5.1.3 There are two main sections within the software, labeled “Compare” and “Synchronize.” On the “Compare” side, you can either drag and drop the folder you wish to backup into the box next to the green sign or hit the “Browse” button and navigate to the folder. To add more folders, hit the sign.
5.1.4 Next, click the blue cog. This opens the “Synchronization Settings” box. Under the “Comparison” tab, choose the desired method the software will use to compare files in the folders on the instrument you will be backing up to the files already stored on the facility network drive. Once you have completed making selections, hit “OK.”
5.1.5 On the “Synchronize” side, either drop and drag the folder you wish to use for backups into the box corresponding to the folder that will be backed up or hit the “Browse” button and navigate to the folder. On the Aurora, the data is stored on the Data (D:) drive in the “User data” folder. The folder used to store the Aurora data backup is located on the facility network server (SCCCFCCF). To locate the

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folder, open the "FCSR" folder on the server and then open the folder labeled "DATA BACKUP." Choose the folder labeled "Aurora" for the data backup. In addition, backup the QC files, which are located at C:\CytekbioExport\Setup. That folder should be backed up to the "Aurora QC files" folder on the "DATA BACKUP" folder on the facility network drive.

5.1.6 Once the backup folders have been entered, hit the green cog next to the "Synchronize" button. This opens the "Synchronization Settings" box. Under the "Synchronization" tab hit the "Update" button. You can then choose the actions you want the program to do. There are 5 buttons, for a total of 5 different actions. To change an action, click on the action button and it will rotate through the options available. Once the setup is complete, hit the "OK" button.

5.1.7 Under the blue "Configuration" bar on the left side of the program, hit the "Save As" button to save the backup sequence. You can also hit the "Save as batch job" button to save a shortcut file to the desktop. This button will allow you to run the backup manually by simply double clicking the icon, instead of opening the software.

5.1.8 To run the backup protocol, hit the "Compare button. This will begin the scan the folder sets and determine which files will need to be backed up. It will display the differences between the two sides and indicate which actions will be taken for each file. You will have the opportunity to change actions for individual files if needed at this step. Next, hit the "Synchronize" button and the backup will begin. Alternatively, you can double click on the batch job icon (if you saved one) and all of these steps will happen in the background automatically.

5.1.9 Once the backup is complete, you can close the FreeFileSync program.

5.1.10 The instrument computer should be backed up manually every day that it is used, as part of the daily shutdown routine.

6. DATA BACKUP ON CYTOF

6.1 Manual Backup of Data

6.1.1 The backup tool FreeFileSync (https://freefilesync.org/) has been installed on the CyTOF computer. This tool allows for the comparison and synchronization of files to create backups.

6.1.2 Open FreeFileSync. To create a backup configuration, click on the "New" button.

6.1.3 There are two main sections within the software, labeled "Compare"

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and “Synchronize.” On the “Compare” side, you can either drag and drop the folder you wish to backup into the box next to the green sign or hit the “Browse” button and navigate to the folder. To add more folders, hit the sign.

6.1.4 Next, click the blue cog. This opens the “Synchronization Settings” box. Under the “Comparison” tab, choose the desired method the software will use to compare files in the folders on the instrument you will be backing up to the files already stored on the facility network drive. Once you have completed making selections, hit “OK.”

6.1.5 On the “Synchronize” side, either drop and drag the folder you wish to use for backups into the box corresponding to the folder that will be backed up or hit the “Browse” button and navigate to the folder. On the CyTOF computer, the data is stored on the Data (E:) drive. The folder used to store the CyTOF data backup is located on the facility network server (SCCCFCCF). To locate the folder, open the “FCSR” folder on the server and then open the folder labeled “CyTOF data sync folder.” There are several folders that correspond to the folders on the CyTOF computer that need to be backed up.

6.1.6 Once the backup folders have been entered, hit the green cog next to the “Synchronize” button. This opens the “Synchronization Settings” box. Under the “Synchronization” tab hit the “Update” button. You can then choose the actions you want the program to do. There are 5 buttons, for a total of 5 different actions. To change an action, click on the action button and it will rotate through the options available. Once the setup is complete, hit the “OK” button.

6.1.7 Under the blue “Configuration” bar on the left side of the program, hit the “Save As” button to save the backup sequence. You can also hit the “Save as batch job” button to save a shortcut file to the desktop. This button will allow you to run the backup manually by simply double clicking the icon, instead of opening the software.

6.1.8 To run the backup protocol, hit the “Compare button. This will begin the scan the folder sets and determine which files will need to be backed up. It will display the differences between the two sides and indicate which actions will be taken for each file. You will have the opportunity to change actions for individual files if needed at this step. Next, hit the “Synchronize” button and the backup will begin. Alternatively, you can double click on the batch job icon (if

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6.1.9 Once the backup is complete, you can close the FreeFileSync program.

6.1.10 The instrument computer should be backed up manually every day that it is used.

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